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PTO/SB/21 (09-04)

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission 38

Application Number	09/726,367
Filing Date	November 29, 2000
First Named Inventor	Lawrence N. Chapman
Art Unit	2617
Examiner Name	MA, Johnny
Attorney Docket Number	PD-990258

ENCLOSURES (Check all that apply)

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|---|--|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form
<input type="checkbox"/> Fee Attached
<input type="checkbox"/> Amendment/Reply
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<input type="checkbox"/> Affidavits/declaration(s)
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<input type="checkbox"/> Express Abandonment Request
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under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)
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of Appeals and Interferences

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(Appeal Notice, Brief, Reply Brief)

<input type="checkbox"/> Proprietary Information

<input type="checkbox"/> Status Letter

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below): |
|---|--|--|

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name The DirectTV Group, Inc.

Signature

Printed name Georgann S. Grunebach

Date June 6, 2006

Reg. No. 33,179

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

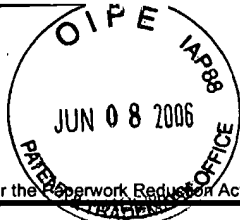
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Typed or printed name Georgann S. Grunebach, Reg. No. 33,179

Date June 6, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (01-06)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL

For FY 2006

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 500

Complete if Known

Application Number	09/726,367
Filing Date	November 29, 2000
First Named Inventor	Lawrence N. Chapman
Examiner Name	MA, Johnny
Art Unit	2617
Attorney Docket No.	PD-990258

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☒ Deposit Account Deposit Account Number: 50-0383 Deposit Account Name: The DIRECTV Group, Inc.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION** (All the fees below are due upon filing or may be subject to a surcharge.)**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
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- 20 or HP = _____ x _____ = _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
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- 3 or HP = _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
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- 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Fee for filing brief in support of an appeal \$500

SUBMITTED BY

Signature	Registration No. (Attorney/Agent) 33,179	Telephone 310-964-4615
Name (Print/Type) Georgann S. Grunebach		Date June 6, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Due Date: June 6, 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Inventor: Lawrence N. Chapman et al.

Serial No.: 09/726,367

Filed: November 29, 2000

Title: BACKWARDS COMPATIBLE REAL-TIME
PROGRAM GUIDE CAPACITY INCREASE

Examiner: Johnny Ma

Group Art Unit: 2617

Appeal No.: _____

BRIEF OF APPELLANTS

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §1.192, Appellants hereby submit the Appellants' Brief on Appeal from the final rejection in the above-identified application, as set forth in the Final Office Action dated December 15, 2005, and from the advisory action dated March 20, 2006.

Please charge the amount of \$500 to cover the required fee for filing this Appeal Brief as set forth under 37 CFR §1.17(c) to Deposit Account No. 50-0383 of The DirecTV Group, Inc., the assignee of the present application. Also, please charge any additional fees or credit any overpayments to Deposit Account No. 50-0383. Fee Transmittal Form PTO/SB/17 is submitted in duplicate.

06/09/2006 NNGUYEN1 00000001 500383 09726367
01 FC:1402 500.00 DA

I. REAL PARTY IN INTEREST

The real party in interest is The DirecTV Group, Inc., the assignee of the present application.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

III. STATUS OF CLAIMS

Claims 1-34 are pending in the application.

Claims 1-3, 9-11, and 16-18 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 6,072,983 to Klosterman (Klosterman) in further view of U.S. Patent No. 5,940,737 to Eastman (Eastman).

Claims 4, 5, 12, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of Eastman and U.S. Patent No. 6,133,910 to Stinebruner (Stinebruner).

Claims 6-7 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of Eastman, and U.S. Patent No. 6,434,384 to Norin et al. (Norin).

Claims 13-14 and 20-21 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of Eastman, Stinebruner, and Norin.

Claim 15 was rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of Eastman, Stinebruner, Norin, and U.S. Patent No. 6,401,242 to Eyer et al. (Eyer).

Claim 15 was rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of Eastman, Stinebruner, and Eyer.

Claim 8 was rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of Eyer and Eastman.

Claims 23-26, 28, and 33 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of U.S. Patent No. 5,666,645 to Thomas et al. (Thomas) and Eastman.

Claims 27 and 31-32 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of

Klosterman in further view of Thomas, Eastman, and Norin.

Claims 29-30 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of Klosterman in further view of Thomas, Eastman, and Stinebruner.

Claim 33 was rejected under 35 U.S.C. §103(a) as being unpatentable over Klosterman in further view of Thomas, Eastman, and Eyer.

Claim 34 was rejected under 35 U.S.C. §103(a) as being unpatentable in view of EP 0 912 054 A2 to Eyer et al. (Eyer2) in further view of Norin and Eastman.

IV. STATUS OF AMENDMENTS

No amendments have been made to the claims subsequent to the final rejection.

The Applicants attempted to amend the preamble of claim 34 to correct a typographical error. This amendment, which was not entered, is reproduced as follows:

In a network broadcasting a first signal having a first set of programs, each of the ~~channels~~ programs in the first set of programs transmitted on an associated one of a plurality of service channels to a plurality of subscribers and a second signal having a second set of programs, each of the second set of programs transmitted on associated one of the plurality of service channels, a method of providing program guide information describing the second set of programs, comprising:

V. SUMMARY OF CLAIMED SUBJECT MATTER

The Applicants' claimed subject matter can be found in the specification as follows:

Claim 1:

In a network broadcasting a first signal (item 618 in FIG. 6, and page 13, lines 20-28) having a first set of programs (items 810 in FIG. 8 and on page 15 col. 26 through page 16, column 24) to a plurality of subscribers and a second signal (item 616 in FIG. 6, and page 13, lines 20-28) having a second set of programs (items 812 of FIG. 8 and on page 15 col. 26 through page 16, column 24), a method of providing program guide information describing the second set of programs, comprising:

broadcasting first program guide information describing the first set of programs to the subscribers on a first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) on the first signal (also, the phrase is collectively shown block 1002 of FIG. 10 and discussed on page 17, lines 16-25); and

broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) on the second signal, wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic (page 17, lines 10-12) of the first signal (shown block 1004 of FIG. 10 and discussed on page 17, lines 16-25).

Claim 9:

In a network broadcasting a first signal (item 618 in FIG. 6, and page 13, lines 20-28) having a first set of programs (items 810 in FIG. 8 and on page 15 col. 26 through page 16, column 24) to a plurality of subscribers and a second signal (item 616 in FIG. 6, and page 13, lines 20-28) having a second set of programs (items 812 of FIG. 8 and on page 15 col. 26 through page 16, column 24) to a subset of the subscribers, a method of receiving program guide information describing the second set of programs, comprising the steps of:

receiving first program guide information describing the first set of programs on a first service channel on the first signal (block 1002 of FIG. 10 and discussion on page 17, lines 16-25 shows broadcasting, reception of broadcasted signals is shown in FIG. 5 and discussed in specification at page 13, lines 9-16); and

receiving second program guide information describing the second set of programs on the first service channel on the second signal, wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic (page 17, lines 10-12) of the first signal (block 1002 of FIG. 10 and discussed on page 17, lines 16-25).

Claim 16:

A receiver (500, disclosed in FIG. 5 and the text in page 9, line 29 through page 13, line 20), comprising:

a user interface (item 524 of FIG. 5, discussed at page 16, lines 4-6) for accepting subscriber commands;

a tuner (block 504 of FIG. 5 and page 10, line 1) selectably configurable to receive a first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) on a first signal (item 618 in FIG. 6, and page 13, lines 20-28) and the first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) on a second signal (item 616 in FIG. 6, and page 13, lines 20-28), the first signal (item 618 in FIG. 6, and page 13, lines 20-28) comprising a first set of programs and first program information describing the first set of programs, and the second signal (item 616 in FIG. 6, and page 13, lines 20-28) comprising a second set of programs and second program guide information describing the second set of programs;

wherein a fundamental signal characteristic (page 17, lines 10-12) of the second signal (item 616 in FIG. 6, and page 13, lines 20-28) differs from the fundamental signal characteristic of the first signal (item 618 in FIG. 6, and page 13, lines 20-28); and

a processor, communicatively coupled to the user interface and the tuner, for retrieving the first program information and the second program information for providing the first and second program information to a presentation device, and for accepting subscriber commands from the user interface.

Claim 23:

An apparatus for use with a system broadcasting a first signal (item 618 in FIG. 6, and page 13, lines 20-28) having a first set of programs to a plurality of subscribers and a second signal having a second set of programs to a subset of the subscribers, comprising:

a compiler, configured to segment the programs into the first set of programs and the second set of programs, and to generate first program guide describing the first set of programs and second program guide information describing the second set of programs;

a first transmitter, communicatively coupled to the compiler, for transmitting first program guide information describing the first set of programs on a first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) on the first signal (item 618 in FIG. 6, and page 13, lines 20-28); and

a second transmitter, communicatively coupled to the compiler, for transmitting the second program guide information describing the second set of programs on the first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) on the second signal (item 616 in FIG. 6, and page 13, lines 20-28);

wherein a fundamental signal characteristic of the second signal (item 616 in FIG. 6, and page 13, lines 20-28) differs from the fundamental signal characteristic of the first signal (item 618 in FIG. 6, and page 13, lines 20-28).

Claim 34:

In a network broadcasting a first signal (item 618 in FIG. 6, and page 13, lines 20-28) having a first set of programs (items 810 in FIG. 8 and on page 15 col. 26 through page 16, column 24), each of the channels in the first set of programs transmitted on an associated one of a plurality of service channels (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) to a plurality of subscribers and a second signal (item 616 in FIG. 6, and page 13, lines 20-28) having a second set of programs, each of the second set of programs (items 812 of FIG. 8 and on page 15 col. 26 through page 16, column 24) transmitted on associated one of the plurality of service channels (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) , a method of providing program guide information describing the second set of programs, comprising:

broadcasting first program guide information describing the first set of programs (items 810 in FIG. 8 and on page 15 col. 26 through page 16, column 24) to the subscribers on a first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16) on the first signal (item 618 in FIG. 6, and page 13, lines 20-28); and

broadcasting second program guide information describing the second set of programs (items 812 in FIG. 8 and on page 15 col. 26 through page 16, column 24) to a subset of the subscribers on the first service channel (FIGs. 4A, 4B, 7 and 8, and in the text at page 13, lines 1-16)

on the second signal (item 616 in FIG. 6, and page 13, lines 20-28), wherein a fundamental signal characteristic of the second signal (item 616 in FIG. 6, and page 13, lines 20-28) differs from the fundamental signal characteristic of the first signal (item 618 in FIG. 6, and page 13, lines 20-28).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-3, 9-11 and 16-18 are patentable under 35 U.S.C. § 103(a) over Klosterman in further view of Eastman.

Whether claims 4, 5, 12, and 19 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman and Stinebruner.

Whether claims 6-7 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman and Norin.

Whether claims 13-14 and 20-21 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman, Stinebruner, and Norin.

Whether claim 15 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman, Stinebruner, Norin and Eyer.

Whether claim 15 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman, Stinebruner, and Eyer.

Whether claim 8 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eyer and Eastman.

Whether claims 23-26, 28, and 33 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas and Eastman.

Whether claims 27 and 31-32 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas, Eastman, and Stinebruner.

Whether claims 29-30 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas, Eastman, and Stinebruner.

Whether claim 33 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas, Eastman, and Eyer.

Whether claim 34 is patentable under 35 U.S.C. §103(a) over Eyer2 in further view of Norin and Eastman.

VII. ARGUMENT

A. The References

1. *The Klosterman Reference*

U.S. Patent No. 6,072,983, issued June 6, 2000 to Klosterman discloses a merging multi-source information in a television system. The system provides a scheme for margin television schedule information received from multiple sources (26, 28, 30 and 34). In the preferred embodiment, a microprocessor (36) mixes and sorts the schedule information received from multiple source devices (26, 28, 30 or 34). The schedule information is then displayed in a television schedule guide (50). A user can select a program (60 or 62) by pointing to that program in the displayed schedule information (50). The system (10) then carries out an automatic switching/tuning such that the required source device (26, 28, 30 or 34) is input to the destination device (22), and a tuner is then tuned to the selected program's channel (52).

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2. *The Eastman Reference*

U.S. Patent No. 5,940,737, issued August 17, 1999 to Eastman discloses a method and apparatus for receiving and/or processing communication signals having one of a plurality of alternate signal characteristics is provided. In a particular embodiment, a desired satellite signal (e.g. DBS) having a desired characteristic may be selected from a plurality of characteristics. The characteristics may include (among others) satellite location, carrier frequency, and/or polarization state. In a preferred embodiment, a receiver generates a control signal which is coupled to an external device (e.g. LNB, and/or satellite selector). The external device includes a decoder which receives the control signal and configures the external device for processing the desired characteristic. In a preferred embodiment, the control signal comprises a pulse train generated by the receiver utilizing a two voltage level output device under suitable software control.

3. *The Stinebruner Reference*

U.S. Patent No. 6,133,910, issued October 17, 2000 to Stinebruner discloses an apparatus and method for integrating a plurality of video sources. The video system utilizes a "virtual tuner"

that integrates signals from multiple video sources to provide a plurality of "virtual channels", each of which has both a video source and a channel associated with it. When a virtual channel is selected, the correct video source is selected and tuned to the correct channel automatically. The virtual tuner may be embodied in a television or in a separate electronic component coupled thereto, such as a direct broadcast satellite receiver. Alternatively, the video system may be embodied in a universal remote control which is capable of outputting multiple signals to multiple devices in response to a key depression, using either one or two signal transmitters. Channel information may also be downloaded or obtained from a database, for example, to customize an electronic component to receive local broadcast channels.

4. The Norin Reference

U.S. Patent No. 6,434,384, issued August 13, 2002 to Norin et al. discloses a non-uniform multi-beam satellite communications system and method. The satellite broadcast system and method, which is said to be particularly useful for television signals, allows for local as well as nationwide broadcast service by allocating greater satellite resources to the more important local service areas. This is accomplished by broadcasting a non-uniform pattern of local service beams and designing the system to establish different service area priorities through factors such as the individual beam powers, sizes, roll-off characteristics and peak-to-edge power differentials. Frequency reuse is enhanced by permitting a certain degree of cross-beam interference, with lower levels of interference established for the more important service areas.

5. The Eyer Reference

U.S. Patent No. 6,401,242, issued June 4, 2002 to Eyer et al. discloses a method and apparatus for designating a preferred source to avoid duplicative programming services. Interactive Program Guide (IPG) data for television is delivered to integrated receiver-decoders (IRDs) in a decoder population via, for example, a satellite network. The IPG data provides scheduling information for global and local programming services which are carried via the satellite network as well as another network such as a CATV network or a terrestrial broadcast network. Each IRD is assigned to an IPG region using unit addressing. At the IRD, IPG data is filtered so that only the

global data and the region-specific data for the IRD's IPG region is retained and processed by the IRD. Channel map data is also delivered to the IRDs so that bundles of IRD data can be filtered out using firmware filtering to discard program sources that are not present in the channel map. The IRD data which is retained after filtering is used to provide scheduling information via an on-screen display. A preferred source may be designated when there are duplicative channels on the different networks.

6. The Thomas Reference

U.S. Patent No. 5,666,645, issued September 9, 1997 to Thomas et al. discloses a data management and distribution system for an electronic program guide ("EPG") for television programs comprising an automated data collection subsystem, a manual entry and correction subsystem, a database validation subsystem, an edition generation subsystem, a configuration subsystem, and a status and control subsystem. The system may further comprise a feed generation subsystem if one or more of the EPG providers supported by the EPG distributor requires a live feed of data. The automated data collection subsystem collects EPG data from multiple sources in various formats, filters the data based on the needs of the EPG providers supported, and places the data in a centralized database in a form suitable to support the different environmental contexts of the EPG providers. The manual entry and correction subsystem permits the EPG distributor to make manual corrections, additions, and deletions to the data stored in the database. The database validation subsystem verifies the data stored in the database in accordance with designated verification options. The edition generation subsystem generates the different editions of the EPG for the different EPG providers supported by the EPG distributor. The configuration subsystem receives information from the various EPG providers and furnishes this information to the other subsystems which utilize the information in performing their respective tasks. The status and control subsystem monitors the operation of the data management and distribution system as a whole. The various feeds and editions are then transmitted to the EPG providers by, e.g., satellite, wire, cable, etc. The EPG providers receive the feeds and editions and use them provide one or both of a dedicated channel EPG and interactive EPG to subscribers.

7. *The Second Eyer Reference*

Publication EP0912054A2 (hereinafter referred to as Eyer2) discloses Interactive Program Guide (IPG) data for television is delivered to integrated receiver-decoders (IRDs) (130) in a decoder population via, for example, a satellite network (110,120). The IPG data provides scheduling information for global and local programming services which are carried via the satellite network as well as another network such as a CATV network (150) or a terrestrial broadcast network. Each IRD (130) is assigned to an IPG region using unit addressing. At the IRD (130), IPG data is filtered so that only the global data (400) and the region-specific data (405, 410, 415) for the IRD's IPG region is retained and processed by the IRD. Channel map data is also delivered to the IRDs so that bundles of IRD data can be filtered out using firmware filtering (185) to discard program sources that are not present in the channel map. The IRD data which is retained after filtering is used to provide scheduling information via an on-screen display (190, 195). A preferred source may be designated when there are duplicative channels on the different networks.

B. Claims 1-3, 9-11 and 16-18 are patentable under 35 U.S.C. § 103(a) over Klosterman in further view of Eastman.

With Respect to Claim 1: Claim 1 recites:

In a network broadcasting a first signal having a first set of programs, each of the programs in the first set of programs transmitted on an associated one of a plurality of service channels to a plurality of subscribers and a second signal having a second set of programs, each of the second set of programs transmitted on an associated one of the plurality of service channels, a method of providing program guide information describing the second set of programs, comprising:

broadcasting first program guide information describing the first set of programs to the subscribers on a first service channel on the first signal; and

broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel on the second signal, wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal.

Klosterman discloses a system wherein program material from a variety of independent sources can be merged and a source identifier is provided with the program guide so that when the user selects that channel, the subscriber's equipment tunes to the appropriate source.

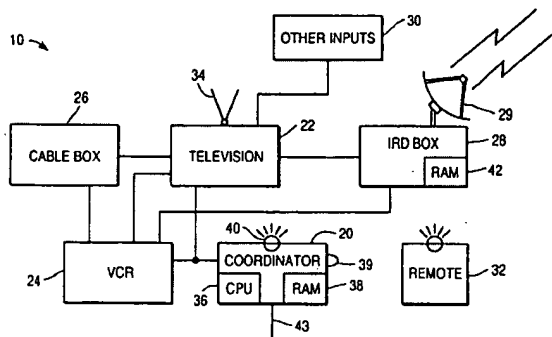


FIG. 1A

When a user selects a show or channel located on one of the displayed channels within a displayed guide, the system reads the source identifier associated with that show or channel. In the preferred embodiment, the system then carries out an automatic switching/tuning process that switches the input to the television (either RF or video) to a source device. Source devices include DBS, cable box, television tuner, etc. The system then tunes to the required channel for the desired show. Additionally, the source identifier can be utilized to switch between various devices automatically when unattended VCR programming is desired. Furthermore, when program information is received from multiple satellite sources and a desired channel is selected, the present invention can, in one embodiment, automatically move the customer's satellite dish such that the customer receives the desired program from the associated source. The present invention then tunes to the correct channel.

In creating a merged television guide, a channel map is created which identifies the channels available on the multiple sources, and identifies their source. For example, in the case of DBS/local channel implementations, a channel map is created with both local cable and DBS channels merged. The local channels and the DBS channels are tagged with a source identifier. When the user/consumer selects a non-DBS channel from the guide, the integrated receiver decoder unit (IRD box) for the satellite switches the IRD to couple the local cable to the receiver. The system then tunes the television tuner or other tuning device to the required channel. If a DBS channel is later selected, the system switches the IRD to couple the satellite receiver/decoder to the receiver. The system then tunes the DBS tuner to the selected DBS channel. In the case of, for example, cable and antenna inputs, the system switches to the correct video input and then tunes the television tuner to the required channel for receiving the selected source. Thus, automatic access to multi-source television schedule guide information is provided.

Klosterman Does not Disclose "Broadcasting Second Program Guide Information

Describing the Second Set of Programs to a Subset of the Subscribers on the First Service Channel on a Second Signal": The Applicants initial Remarks indicated that Klosterman does not disclose *broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel on a second signal*.

The First Office Action: The First Office Action responded that the feature "the same service channel being the same channel used to broadcast the first program guide" is not recited in the claims. The Applicants respectfully disagreed, and pointed out that claim 1 recites that the first program guide is transmitted on *a first service channel on a first signal* and that the second program guide is broadcast on the first service channel on a second signal. Clearly, they are broadcast on the same service channel.

The Second Office Action: The Second Office Action then responded that the claimed feature is disclosed in the Klosterman reference.

The Applicants disagreed. Klosterman discloses three embodiments. Embodiment 1 combines a cable input and a satellite dish. Embodiment 2 discloses combining inputs from two satellites. Embodiment 3 combines “local cable” and satellite inputs.

The first and third embodiments clearly do not disclose a system wherein the second program guide information is broadcast on the first service channel (the same that was used to broadcast the first program guide). This is plainly the case because the same service channels are not available from cable and satellite systems (at least, the Klosterman reference certainly does not disclose this).

The second embodiment (which combines the input from a first satellite and a second satellite) is likewise unavailing, as it plainly does not disclose that the second program guide information is transmitted on the same service channel as the first.

The Final Office Action: The Final Office Action disagreed, and responded by *introducing* something that is neither known in the art nor disclosed in Klosterman ... the notion of a “satellite broadcast channel”:

“the input from a first satellite and a second satellite does disclose a second program guide information transmitted [on] the same service channel as the first [program guide information] since the first and second program guide information are transmitted via satellite broadcast channel (first service channel).”

What is a “satellite broadcast channel”? The Final Office Action first defines a “channel” as a “band of frequencies” then argues that a satellite broadcasting information on a “band of frequencies” is broadcasting on a “satellite broadcast channel.”

This argument is erroneous because it relies on a definition of a “channel” is at best, incomplete and at worst, incorrect. As a general matter:

- (1) In Frequency Division Multiple Access (FDMA) systems, a channel spans a frequency band. However, this does not mean that any “band of frequencies” is a “channel”. For example, in a broadcast AM FDM system, the frequencies 570KHz-1610KHz band does not represent “a channel” in the ordinary sense, but rather a plurality of them.
- (2) In a Time-Division Multiple Access (TDMA) system, channels are defined by time slots, not frequencies.
- (3) In a Code-Division Multiple Access (CDMA) system, channels are defined by the pseudonormal (PN) codes associated with the channel.

Using this erroneous definition, the Final Office Action argues that a “satellite broadcast channel” (singular) is a plurality of “channels” (plural) used by the satellites to broadcast data.

“Thus, a satellite broadcast channel is discussed in the previous Office Action as a band of channels used by satellites to broadcast data, it is unclear why such a definition is inconsistent with Klosterman which fails to disclose a contradictory definition of a satellite channel.”

The Final Office Action arrives at this erroneous conclusion because it assumes that since a channel spans a frequency band, that means any frequency band can be referred to as a “channel” (in this case, by defining a “satellite broadcast channel” to include the plurality of the channels of information transmitted by the satellite).

The Applicants have stated that this argument is inconsistent with Klosterman itself. The Final Office Action asks why. It is simple. Klosterman describes a system that transmits multiple “channels” of information from each satellite, not a channel of information:

In creating a merged television guide, a channel map is created which identifies the channels available on the multiple sources, and identifies their source. For example, in the case of DBS/local channel implementations, a channel map is created with both local cable and DBS channels merged. The local channels and the DBS channels are tagged with a source identifier. When the user/consumer selects a non-DBS channel from the guide, the integrated receiver decoder unit (IRD box) for the satellite switches the IRD to couple the local cable to the receiver. The system then tunes the television tuner or other tuning device to the required channel. If a DBS channel is later selected, the system switches the IRD to couple the satellite receiver/decoder to the receiver. The system then tunes the DBS tuner to the selected DBS channel. In the case of, for example, cable and antenna inputs, the system switches to the correct video input and then tunes the television tuner to the required channel for receiving the selected source. Thus, automatic access to multi-source television schedule guide information is provided. (col. 3, lines 36-55)

Furthermore, when program information is received from multiple satellite sources and a desired channel is selected, the present invention can, in one embodiment, automatically move the customer’s satellite dish such that the customer receives the desired program from the associated source. The present invention then tunes to the correct channel. (col. 3, lines 28-35)

The Advisory Action: In response to the foregoing the Advisory Action replies that MPEP 2111.01 requires that the “claims must be interpreted as broadly as their terms reasonably allow”. However, MPEP 2111.01 also cites *In re Okuzawa*, which emphasizes that “... claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification, giving

them their 'broadest reasonable interpretation". *In re Okuzawa*, 537 F.2d 545, 548, 190 USPQ 464, 466 (CCPA 1976)). The problem with the instant rejection is that it is not reasonable ... it is incorrect because a "channel" is not equivalent to a "band of frequencies".

It is true that in FDMA systems, channels occupy a "band of frequencies", but it is not necessarily true that a "band of frequencies" represents a channel. In FDMA, a band of frequencies could represent *less* than a channel or *more* than a channel. Further, TDMA and CDMA systems do not define channels in terms of frequencies, but rather, time and code, respectively. Simply put, a "channel" and a "band of frequencies" are not equivalent, and for this reason alone, the Examiner's "broadest reasonable interpretation" is in error.

The Advisory Action also claims that the "Applicant's specification does not provide a clear definition for a "service channel." This is not so. The Applicants' specification is replete with discussions of the "service channel". FIGs. 4A and 4B and the text related to them discusses service channels and the service channel ID (SCID):

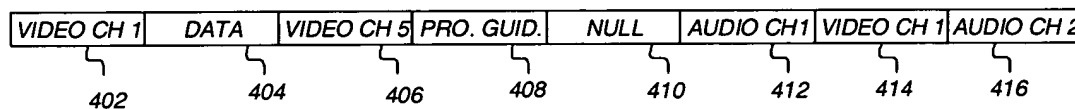


FIG. 4A

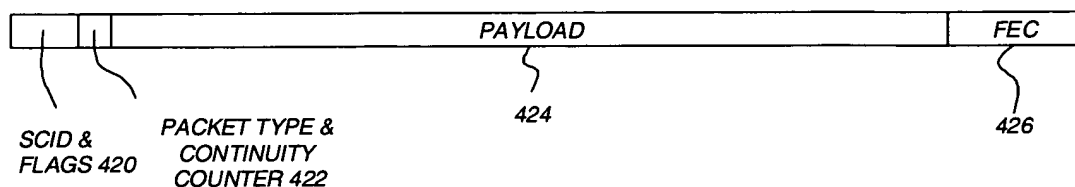


FIG. 4B

The Applicant's specification describes "service channels" as follows:

Each of the satellites 108 comprises a transponder, which accepts program information from the uplink center 104, and relays this information to the subscriber receiving station 110. Known multiplexing techniques are used so that multiple channels can be provided to the user. These multiplexing techniques include, by way of example, various

statistical or other time domain multiplexing techniques and polarization multiplexing. In one embodiment of the invention, *a single transponder operating at a single frequency band carries a plurality of channels identified by respective service channel identification (SCID).*

Preferably, the IRD 500 also receives and stores a program guide in a memory available to the microcontroller 510. Typically, the program guide is received in one or more data packets in the data stream from the satellite 108. The program guide can be accessed and searched by the execution of suitable operation steps implemented by the microcontroller 510 and stored in the processor ROM 538. The program guide may include data to map viewer channel numbers to satellite transponders and service channel identifications (SCIDs), and also provide TV program listing information to the subscriber 122 identifying program events. (page 13, lines 1-16, emphasis added)

Service channels are also illustrated in FIG. 7 (reproduced below):

CONUS MPG CONTENT		SPOT BEAM MPG CONTENT	
SIGNAL/SCID	DESCRIPTION	SIGNAL/SCID	DESCRIPTION
FIRST /10	PROGRAM 1	FIRST /10	PROGRAM 1
.	PROGRAM 2	.	PROGRAM 2
.	PROGRAM 3	.	PROGRAM 3
.	PROGRAM 4	.	PROGRAM 4
FIRST 0X499	PROGRAM N	FIRST 0X499	PROGRAM N
SECOND 0X49A	PROGRAM N+1	SECOND 0X49A	LOCAL PROGRAM 1
.	PROGRAM N+2	.	.
.	PROGRAM N+3	.	.
SECOND/0X4FF	PROGRAM M	SECOND/0X4FF	LOCAL PROGRAM 101
.	.	.	.
.	.	.	.
.	.	.	.

FIG. 7

FIG. 8 and the discussion associated with it describes the relationship between service channels and viewer channels:

When the user selects one of channels 810, the transport chip 508 in the IRD 500 finds data packets with the proper SCID, and assembles and prepares them for presentation. However, when the user selects one of the viewer channels dedicated to local programming (e.g. local channels 812), the IRD 500 is configured to receive the second signal 618 from the

second satellite 602. This can be accomplished in a number of ways. In one embodiment, the IRD 500 is simply tuned to receive a different frequency matching the transmissions from the transponder on the second satellite 602 transmitting the second signal 618. In another embodiment, the receiver station 110 is reconfigured to receive the second signal 618 at a different polarization than the first signal. In yet another embodiment, the receiver station's antenna is mechanically or electronically steered to a second satellite, or a second LNB is selected effectively displacing the beam sensitivity pattern of the receiver station 110 antenna. Alternatively or in addition to the above, the selection of the second signal 618 can be accomplished by a direct command from the user (rather than by the selection of a viewer channel associated with one of the local channels 812).

The diagram shows a channel guide interface 712. It consists of a table with columns for channel number, network, and program titles at different times. Brackets below the table group columns into categories 814, 816A, 816B, and 816C. Labels 802, 804, 806A, 806B, and 806C point to specific elements in the table header.

Ch	NETWORK	8:00 PM	8:30 PM	9:00 PM
01	HBO	Backdraft	Backdraft	Titanic
02	TBS	Live!	Live!	Live!
03	HISTORY CHANNEL	Hitler's Lost Wine Cellar	Hitler's Lost Wine Cellar	Hitler's Lost Wine Cellar
04	DISCOVER	The Owens Valley	The Owens Valley	The Owens Valley
.
.
.
899	BET	News	The Wiz	The Wiz
900	LOCAL CHANNEL 1	Select for More Info		
901	LOCAL CHANNEL 2	Select for More Info		
902	LOCAL CHANNEL 3	Select for More Info		
903	LOCAL CHANNEL 4	Select for More Info		
.
.
.
1000	LOCAL CHANNEL 101	Select for More Info		

Labels and brackets in the diagram:

- 802 points to the 'Ch' header.
- 804 points to the 'NETWORK' header.
- 806A points to the '8:00 PM' header.
- 806B points to the '8:30 PM' header.
- 806C points to the '9:00 PM' header.
- 712 points to the entire table.
- 814 is a bracket under the first two columns (Ch, NETWORK).
- 816A is a bracket under the '8:00 PM' column.
- 816B is a bracket under the '8:30 PM' column.
- 816C is a bracket under the '9:00 PM' column.

FIG. 8

Claim 1 Recites a "Service Channel", not a "Channel" and not a "Satellite Broadcast Channel": Claim 1 recites a "service channel," not a "channel," and not a "satellite broadcast channel." The Final Office Action answers:

"the features upon which the Applicant relies (i.e. service channel distinguished from a channel) is not recited in the rejected claim(s)."

This is plainly untrue. The Applicants claims recite a “*service* channel” ... not a “channel” and not the Final Office Action’s “satellite broadcast channel”. While limitations are not read from the specification into the claims (there is no need to here, as the “service” limitation *is recited*) the Examiner is to consider each and every feature of the Applicants claims. The rejection is in error because he has “broadly interpreted” the term “service” right out of the claim.

Klosterman Does not Teach a System Wherein the First and the Second Signals Differ in a Fundamental Signal Characteristic: Finally, if the Second Office Action’s “satellite broadcast channel” encompasses signals with different content, each transmitted on the same “satellite broadcast channel”, Klosterman is still unavailing, because claim 1 recites that the first and the second signals *differ in a fundamental signal characteristic*. If the Second Office Action’s “satellite broadcast channel” encompasses signals with different fundamental characteristics, how can they be regarded to be on the same “satellite broadcast channel”?

The Final Office Action acknowledges that Klosterman doesn’t teach this feature, and instead relies on Eastman. But if Klosterman requires the signals to be transmitted on the same “satellite broadcast channel” how can the signals also have different fundamental characteristics? Eastman teaches signals at different downlink frequencies. According to the Final Office Action’s definition, these cannot both be the same “satellite broadcast channel”. Neither can they be considered to be the same “satellite broadcast channel” if they broadcast with different polarizations.

The Advisory Action answers that “the satellite broadcast channel refers to all satellite transmissions, in any form, therefore the Examiner respectfully disagrees that different fundamental characteristics cannot be regarded as the same broadcast channel.” Here, the Examiner goes even further awry with his definition of “channel”. Can it be reasonably assumed that all satellite transmissions, in any form, are transmitted on the same channel? All satellite-to-satellite communications on the same “channel” as satellite-to-ground transmissions? On the same channel as satellite commands from ground stations or telemetry from the satellite *to* the ground stations? Respectfully, no one of ordinary skill in the art would consider all of these transmissions to be on the same “satellite broadcast channel.”

Klosterman Does Not Teach Broadcasting the Second Program Guide Information to a Subset of the Subscribers: Klosterman also does not disclose or teach that the second signal is broadcast to a *subset* of subscribers. The Office Action argues:

“the recipients of the local channels/guide are a subset of the recipients of the DBS channels/guide wherein a subset of the DBS channel recipients may comprise all of the DBS channel recipients. Furthermore, local channels correspond to specific localities, the recipients of the DBS channels/guide (non-local channels) also receive local channels specific to their geographic location resulting in the recipients of the local channels/guide comprising a subset of the recipients of the DBS channels/guide”

This distorts the teaching of Klosterman. In all of the arguments above, the Office Action relied on Klosterman’s second example ... which disclosed signals being received from two different satellites. Klosterman expressly teaches that DBS systems do not receive local programming:

“Unfortunately, a DBS system normally does not receive local network or local independent channels. In order to provide these missing local channels, some DBS receivers are capable of automatically switching between the DBS satellite input and a local input. This is accomplished by placing the IRD box between the television (or a VCR connected to the television) and the local line (local cable or local antennae). When a local channel is selected by the user, the IRD box automatically removes DBS from service and becomes a bypass for the local input. A user can select a local channel either manually or with a remote control. Access to locally available channels is crucial because the majority of prime time viewing is on those local networks.”

That is the very reason that Klosterman is of value. If the DBS satellite presented local channels, Klosterman would not be needed at all.

Therefore, Klosterman certainly does not teach broadcasting to a subset of subscribers ... it in fact teaches away from this.

The Advisory Action replies by pointing out that it is not impossible to modify Klosterman as he suggests:

“The Klosterman reference does not disclose that a DBS system does not receive local network or local independent channels in all circumstances. Furthermore, the remainder of the Klosterman disclosure does not appear to impose this limitation on the Klosterman system.”

But that is not the issue. The issue is what Klosterman would have fairly taught one of ordinary skill at the time the invention was made, not what can be cobbled together using hindsight reconstruction.

The Combination of the Klosterman and Eastman References is Improper: The First Office Action indicated that the motivation to modify Klosterman as described in Eastman would have been “in order to alleviate the need to move the satellite dish for receipt of signals from a second source.”

There are three problems with this argument.

First, satellite antennas for receiving digital video are typically narrow in beamwidth, and typically, use antennas with single reflectors and multiple feeds in order to “avoid the need to move the satellite dish for receipt of signals from a second source.” Hence, the proffered motivation is illusory.

Second Klosterman teaches away from the proffered modification. Klosterman teaches that when a channel from another satellite is selected, the antenna is slewed to point at the second satellite instead of the first, thus teaching physical diversity between the signals and that the signals do not differ in a fundamental signal characteristic, as recited in claim 1.

The Second Office Action answered by that Klosterman does not “preclude[s] a motivation to combine the references.”

However, rebuttal of a prima facie case of obviousness does not require that the Applicant show that the modification be *precluded*. All that is required is to show that the art relied upon teaches away from the Applicants’ invention. As recited in M.P.E.P. § 1504.03:

“A *prima facie* case of obviousness can be rebutted if the applicant...can show that the art in any material respect ‘taught away’ from the claimed invention...A reference may be said to teach away when a person of ordinary skill, upon reading the reference...would be led in a direction divergent from the path that was taken by the applicant.” *In re Haruna*, 249 F.3d 1327, 58USPQ2d 1517 (Fed. Cir. 2001).

Hence, even if a *prima facie* case of obviousness was made, it has been rebutted.

Finally, the Final Office Action answered:

“... it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning. But so long as it takes into account knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from the applicant’s disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The problem here is that the rejection *does* include knowledge gleaned only from the Applicant’s disclosure. As demonstrated above, the proffered motivation for modifying Klosterman is illusory and Klosterman itself teaches away from the suggested modification.

The Advisory Action’s answer to the foregoing is simply a matter of hindsight reconstruction. Klosterman plainly teaches physical diversity, which would lead one of ordinary skill in the art away from the Applicants’ invention.

Claims 9 and 16 recite features analogous to those of claim 1 and are patentable for the same reasons.

Claims 2-3, 10-11, and 17-18 recite the features of claims 1, 9, and 16, respectively, and are patentable on the same basis.

C. Claims 4, 5, 12, and 19 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman and Stinebruner.

Claims 4, 5, 12, and 19 recite the features of claims 1, 9, and 16, respectively, and are patentable on the same basis

D. Claims 6-7 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman and Norin.

Claims 6-7 recite the features of claim 1 and are patentable on the same basis.

E. Claims 13-14 and 20-21 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman, Stinebruner, and Norin.

Claims 13-14 and 20-21 recite the features of claims 9 and 16, respectively, and are patentable on the same basis.

F. Claim 15 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman, Stinebruner, Norin and Eyer.

Claim 15 recites the features of claim 9 and is patentable on the same basis.

G. Claim 15 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eastman, Stinebruner, and Eyer.

Claim 15 recites the features of claim 9 and is patentable on the same basis.

H. Claim 8 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Eyer and Eastman.

Claim 8 recites the features of claim 1 and is patentable on the same basis.

I. Claims 23-26, 28, and 33 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas and Eastman.

With Respect to Claim 23: Claim 23 recites:

An apparatus for use with a system broadcasting a first signal having a first set of programs to a plurality of subscribers and a second signal having a second set of programs to a subset of the subscribers, comprising:

a compiler, configured to segment the programs into the first set of programs and the second set of programs, and to generate first program guide describing the first set of programs and second program guide information describing the second set of programs;

a first transmitter, communicatively coupled to the compiler, for transmitting first program guide information describing the first set of programs on a first service channel on [[a]] the first signal; and

a second transmitter, communicatively coupled to the compiler, for transmitting the second program guide information describing the second set of programs on the first service channel on [[a]] the second signal;

wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal.

Claim 23 is rejected as unpatentable over Klosterman in view of Thomas, and in further view of Eastman.

As a threshold matter, Claim 23, like claim 1, recites the transmission of first program guide information ... on a first service channel on the first signal and ... the transmission of the second program guide information ... on the first service channel on the second signal. For all the reasons described above, these features are not taught by Klosterman and Eastman, even when combined. Also, for the reasons described above, the Applicants respectfully disagree that there is a teaching to combine the Klosterman and Eastman references.

The Rejection Misconstrues Klosterman: Turning first to what Klosterman discloses, the Second Office Action indicated that the transmission of first program guide information ... on a first service channel on the first signal is disclosed by Klosterman's

"IRD box 28 receives television programs along with other information via, in one embodiment, satellite dish 29" and the transmission of the second program guide information ... on the first service channel on the second signal by Klosterman's "program guide information can be received through cable box 26, other inputs 30, antenna 34 and/or through any other transmission medium (e.g. dedicated twisted pair telephone line)."

The Applicants disagreed, because the television program signals received on a satellite dish 29 are *not* received on the same channel (the *first service channel* of claim 23) channel as those received through a cable box 26, other inputs 30, antenna 34, and a dedicated twisted pair telephone line.

The Final Office Action's answer relies again on the notion of the "satellite broadcast channel" ... a notion that is of it's on invention and is not found in any of the cited references. For the reasons described above with respect to claim 1, the Applicants respectfully traverse.

Klosterman is Not Combinable with Thomas: Plainly, Klosterman is directed to a system in which program guide information from a variety of different sources are received and merged *by the user's receiving equipment*. Just as plainly, Thomas is directed to a system in which program guide information is obtained from a variety of sources, merged by a third party and provided to broadcasters so that they may broadcast a merged program guide, thus obviating the need for the user's equipment to merge the program guide information. Klosterman and Thomas plainly teach away from one another because they entirely different approaches to the same problem.

Claims 24-26, 28, and 33 recite the features of claim 23 and are patentable on the same basis.

J. Claims 27 and 31-32 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas, Eastman, and Stinebruner.

Claims 27 and 31-32 recite the features of claim 23 and are patentable on the same basis.

K. Claims 29-30 are patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas, Eastman, and Stinebruner.

Claims 27 and 31-32 recite the features of claim 23 and are patentable on the same basis.

L. Claim 33 is patentable under 35 U.S.C. §103(a) over Klosterman in further view of Thomas, Eastman, and Eyer.

Claim 33 recites the features of claim 23 and are patentable on the same basis.

M. Claim 34 is patentable under 35 U.S.C. §103(a) over Eyer2 in further view of Norin and Eastman.

Claim 34 recites:

In a network broadcasting a first signal having a first set of programs, each of the channels in the first set of programs transmitted on an associated one of a plurality of service channels to a plurality of subscribers and a second signal having a second set of programs, each of the second set of programs transmitted on associated one of the plurality of service channels, a method of providing program guide information describing the second set of programs, comprising:

broadcasting first program guide information describing the first set of programs to the subscribers on a first service channel on the first signal; and

broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel on the second signal, wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal.

The Final Office Action indicates that

“The claimed ‘broadcasting first program guide information describing the first set of programs to the subscribers on the first service channel [...]’ is met by ‘FIG. 4 illustrates the transmission and reception of global and regional IPG data in accordance with the present invention. IPG data bundles which are broadcast, e.g., over a satellite network to a user’s home, include global IPG data in a bundle 0 or B0 (400) (Eyer [0071]). The claimed ‘broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel [...]’ is met by ‘FIG. 4 illustrates the transmission and reception of global and regional IPG data in accordance with the present invention. IPG data bundles which are broadcast, e.g., over a satellite network to a user’s home, include ... IPG data for a specific IPG region, e.g. region A, in an associated bundle 1 or B1 (405), IPG data for a region B in an associated bundle B1 (410, and IPG data for a region C in an associated bundle B1 (415). Regions A, B, and C are different IPG regions that are served by a common satellite broadcast network (Eyer [0071])”

However, Eyer does not disclose *broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel on the second signal*, as claim 34 requires. Instead, the “second program guide information describing the second set of programs” is transmitted on a different service channel (B1 instead of B0). Also, the transmission of programs to different regions A, B, and C on channel B1 does not read on claim 34, as those subscribers in region B are not a *subset* of the subscribers recited in claim 34, but rather a *different* set. Eyer in fact discloses reserving a separate service channel for transmitting the information of interest, and in so doing, teaches away from the Applicants’ invention.

The Applicants also disagree regarding whether there is any motivation to combine Eyer2 with Norin. The proffered motivation (reducing processor load required to filter out the received

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IPG data) appears to be taken from the Applicants' disclosure (see page 2, line 25-28) rather than the prior art.


The Final Office Action has also failed to provide a motivation for modifying Eyer 2 as described in Eastman (instead, referring to Klosterman).

VIII. CONCLUSION

In light of the above arguments, Appellants respectfully submit that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellants' claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103. As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

Date: June 6, 2006

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CLAIMS APPENDIX

1. (PREVIOUSLY PRESENTED) In a network broadcasting a first signal having a first set of programs to a plurality of subscribers and a second signal having a second set of programs, a method of providing program guide information describing the second set of programs, comprising:

broadcasting first program guide information describing the first set of programs to the subscribers on a first service channel on the first signal; and

broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel on the second signal, wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal.

2. (ORIGINAL) The method of Claim 1, wherein the fundamental signal characteristic is carrier frequency, and the first signal is characterized by a first carrier frequency and the second signal is characterized by a second carrier frequency.

3. (ORIGINAL) The method of Claim 1, wherein the fundamental signal characteristic is polarization and the first signal is characterized by a first polarization and the second signal is characterized by a second polarization.

4. (ORIGINAL) The method of Claim 1, wherein the first program guide information includes information describing at least one surrogate channel.

5. (ORIGINAL) The method of Claim 4, wherein a subscriber selection of at least one of the at least one surrogate channels commands reception of the second signal.

6. (ORIGINAL) The method of Claim 1, wherein the second signal is a spot beam directed at the subset of subscribers.

7. (ORIGINAL) The method of Claim 1, wherein the second set of programs comprise local programs and the second signal is a spot beam directed at a subset of the subscribers that are designated to receive the second set of programs.

8. (ORIGINAL) The method of Claim 1, wherein the second signal further includes a portion of the first set of programs and the second program information further describes the portion of the first set of programs.

9. (PREVIOUSLY PRESENTED) In a network broadcasting a first signal having a first set of programs to a plurality of subscribers and a second signal having a second set of programs to a subset of the subscribers, a method of receiving program guide information describing the second set of programs, comprising the steps of:

receiving first program guide information describing the first set of programs on a first service channel on the first signal; and

receiving second program guide information describing the second set of programs on the first service channel on the second signal, wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal.

10. (ORIGINAL) The method of Claim 9, wherein the fundamental signal characteristic is carrier frequency, and the first signal is characterized by a first carrier frequency and the second signal is characterized by a second carrier frequency.

11. (ORIGINAL) The method of Claim 9, wherein the fundamental signal characteristic is polarization and the first signal is characterized by a first polarization and the second signal is characterized by a second polarization.

12. (ORIGINAL) The method of Claim 10, wherein the first program guide information includes information describing at least one surrogate channel and the method further comprises the step of:

accepting a selection of at least one of the at least one surrogate channels in a receiver; and receiving the second signal at the second carrier frequency on the first service channel.

13. (ORIGINAL) The method of Claim 12, wherein the second signal is a spot beam directed at the receiver.

14. (ORIGINAL) The method of Claim 12, wherein the second set of programs are local programs and the second signal is a spot beam directed at a subset of subscribers designated to receive the second set of programs.

15. (ORIGINAL) The method of Claim 14, wherein the second signal further includes a portion of the first set of programs and the second program information further describes the portion of the first set of programs.

16. (ORIGINAL) A receiver, comprising:
a user interface for accepting subscriber commands;
a tuner selectably configurable to receive a first service channel on a first signal and the first service channel on a second signal, the first signal comprising a first set of programs and first program information describing the first set of programs, and the second signal comprising a second set of programs and second program guide information describing the second set of programs;
wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal; and
a processor, communicatively coupled to the user interface and the tuner, for retrieving the first program information and the second program information for providing the first and second program information to a presentation device, and for accepting subscriber commands from the user interface.

17. (ORIGINAL) The receiver of Claim 16, wherein the fundamental signal characteristic is carrier frequency, and the first signal is characterized by a first carrier frequency and the second signal is characterized by a second carrier frequency.

18. (ORIGINAL) The receiver of Claim 16, wherein the fundamental signal characteristic is polarization and the first signal is characterized by a first polarization and the second signal is characterized by a second polarization.

19. (ORIGINAL) The receiver of Claim 16, wherein:
the first program guide includes information describing at least one surrogate channel;
the subscriber commands include a command to select at least one of the at least one surrogate channels; and
the processor further tunes the tuner to receive the second program guide information in response to the command to select at least one of the at least one surrogate channels.

20. (ORIGINAL) The receiver of Claim 19, wherein the second signal is a spot beam directed at the receiver.

21. (ORIGINAL) The receiver of Claim 19, wherein the second set of programs are local programs and the second signal is a spot beam directed at a subset of subscribers designated to receive the second set of programs.

22. (ORIGINAL) The receiver of Claim 19, wherein the second signal further includes a portion of the first set of programs and the second program information further describes the portion of the first set of programs.

23. (PREVIOUSLY PRESENTED) An apparatus for use with a system broadcasting a first signal having a first set of programs to a plurality of subscribers and a second signal having a second set of programs to a subset of the subscribers, comprising:

a compiler, configured to segment the programs into the first set of programs and the second set of programs, and to generate first program guide describing the first set of programs and second program guide information describing the second set of programs;

a first transmitter, communicatively coupled to the compiler, for transmitting first program guide information describing the first set of programs on a first service channel on the first signal; and

a second transmitter, communicatively coupled to the compiler, for transmitting the second program guide information describing the second set of programs on the first service channel on the second signal;

wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal.

24. (ORIGINAL) The apparatus of Claim 23, wherein the fundamental signal characteristic is carrier frequency, and the first signal is characterized by a first carrier frequency and the second signal is characterized by a second carrier frequency.

25. (ORIGINAL) The apparatus of Claim 23, wherein the fundamental signal characteristic is polarization and the first signal is characterized by a first polarization and the second signal is characterized by a second polarization.

26. (ORIGINAL) The apparatus of Claim 23, wherein the first transmitter comprises a first transponder and the second transmitter comprises a second transponder.

27. (ORIGINAL) The apparatus of Claim 26, wherein the first transponder and the second transponder are disposed on a satellite.

28. (ORIGINAL) The apparatus of Claim 23, wherein the first transponder is disposed on a first satellite and the second transponder is disposed on a second satellite, and wherein the first satellite and the second satellite are disposed within a beamwidth of a receiver antenna.

29. (ORIGINAL) The apparatus of Claim 23, wherein the first program guide information includes information describing at least one surrogate channel.

30. (PREVIOUSLY PRESENTED) The apparatus of Claim 29, wherein a subscriber selection of at least one of the at least one surrogate channels commands reception of the second signal.

31. (ORIGINAL) The apparatus of Claim 23, wherein the second signal is a spot beam directed at a subset of subscribers.

32. (ORIGINAL) The apparatus of Claim 23, wherein the second set of programs comprise local programs and the second signal is a spot beam directed at a subset of the subscribers that are designated to receive the second set of programs.

33. (ORIGINAL) The apparatus of Claim 23, wherein the second signal further includes a portion of the first set of programs and the second program information further describes a portion of the first set of programs.

34. (PREVIOUSLY PRESENTED) In a network broadcasting a first signal having a first set of programs, each of the channels in the first set of programs transmitted on an associated one of a plurality of service channels to a plurality of subscribers and a second signal having a second set of programs, each of the second set of programs transmitted on associated one of the plurality of service channels, a method of providing program guide information describing the second set of programs, comprising:

broadcasting first program guide information describing the first set of programs to the subscribers on a first service channel on the first signal; and

broadcasting second program guide information describing the second set of programs to a subset of the subscribers on the first service channel on the second signal, wherein a fundamental signal characteristic of the second signal differs from the fundamental signal characteristic of the first signal.

EVIDENCE APPENDIX

(none)

RELATED APPEALS AND INTERFERENCES APPENDIX

(none)